TELEMATION INTERNATIONAL, INC.

Interest: Provider of billing and collection services in 900 pay-per-call industry

900 service provider portability:

Number portability would destroy the relationship between information provider and 900 carrier by enabling subscribers to switch 900 carriers easily. (3) Since Congress relied on the integral dependent relationship between information provider and 900 carrier in enacting the Telephone Disclosure and Dispute Resolution Act of 1992 (TDDRA), number portability would affect enforcement of the TDDRA and later pay-per-call regulations. (2-3) 900 number portability also would upset the delicate financial relationships between the billing entity and the 900 carrier, information provider, and end user. (3)

TELEPORT COMMUNICATIONS GROUP

Interest: Competitive local service provider

Importance of number portability:

Service provider number portability:

TCG's sales force has been told by many potential customers that they will not consider changing their telephone numbers (2). Number portability is plainly in the public interest (3-4).

Service and location portability:

It is neither necessary nor desirable to address these types of portability at this time (5). Neither has the same potential impact on customer choice and competitive opportunities as service provider portability, and consideration of them will only delay and complicate the essential task of implementing service provider portability (5-6).

Location portability:

The FCC's role in number portability:

State regulators have a legitimate interest in the development of number portability; however, the Commission must ensure that any state solution becomes permanent only when it conforms to national standards established by the FCC (4). Contents of any distributed data bases should be determined by an industry group subject to meeting FCC criteria. The industry will ultimately determine which of the various system designs will work most efficiently (9). Short term or interim data base solutions by may be authorized or encouraged by states should not be precluded, but the Commission should encourage states to ensure these solutions not impede migration to an optimal long term architecture. The Commission should focus its attention on setting the technical standards (9-10). It should establish the requirements for network interconnection and the general model for how ported calls are processed, but should not specify an architecture, for these must be tested in the marketplace (10). The Commission should establish a specific and definite time table for implementation (12). The first date certain should be the date for development of a standard -- 9/12/96. The second date certain should be the date for implementation -- all carriers in the top 100 markets should provide service provider portability no later than 24 months after issuance of an order; in smaller markets, within 24 months after bona fide request (12). The Commission should not create an advisory committee at this time; this would delay the process (14-

15). If the industry fails to make progress, LECs should be required to solicit concrete program development and installation proposals (15). To give incumbent LECs an incentive to move forward, the Commission should consider economic incentives, such as discounts for services needed by competitors during the transition; no additional charges for interim number portability solutions; discounting of interconnection-related charges (15-16).

The following criteria should be used: no loss of quality or functionality; existing network infrastructure and standards should not be undermined or degraded; support both wireline and wireless services; called party number must be available for all numbers; conserve NANP resources; not inhibit migration to other forms of portability in addition to service provider portability; impose equivalent relative obligations on all LECs; balance involvement of and investment by LECs and IXCs; be provided in the open public domain, free of licensing fees; no impact on ported Service Access Codes (11); the data base must be administered by a neutral party (13).

Long-term solutions regarding number portability:

True service provider portability can only be provided using a network of distributed data bases (7). A strong national standard is needed so that switches of all vendors can be adapted at reasonable cost (8). National standards must be established for digital end office and tandem switches, for SS7 functionalities, and for local number portability data base vendors (9).

Cost recovery:

Incremental number portability costs may turn out lower than estimated because many carrier already are installing SS7, IN, and AIN technologies (13). All costs should be borne by the carriers that incur them, and may be recovered the same as other network upgrades (14).

Interim measures regarding number portability:

Existing services such as remote call forwarding and direct inward dialing are not interim number portability; they are inadequate quick fixes that entrench the incumbent monopolist and undermine the evolution of true portability (6-7).

TELESERVICES INDUSTRY ASSOCIATION

Interest: Association of 900 service providers

900 service provider portability:

900 portability would promote competition among IXCs (3). Costs of implementing 900 portability, if amortized by LECs over ten years, would be less than 3 cents per minute (4). 900 portability should be mandated by the Commission as soon as possible (5). It is crucial to the success of the 900 industry (5). Portability would promote lower rates and allow use of multiple carriers, as in the 800 market (6). The end result will be provision of better information services to the public (7). The 900 portability database should be implemented at the same time the LECs implement the network for the 888 service access code; it involves the same changes to the network (7-8). The 900 industry cannot afford to wait for AIN implementation several years from now (8-9). An industry forum should assure implementation of 900 portability as soon as possible (9).

TEXAS ADVISORY COMMISSION ON EMERGENCY COMMUNICATIONS

Interest: State public safety agency.

Long-term solutions regarding number portability:

Any long-term solution must support E-911 services (3).

Interim measures regarding number portability:

If interim measures can not be made compatible with E-911, the public and PSAP personnel must be educated about this deficiency (3-4).

TIME WARNER COMMUNICATIONS HOLDINGS, INC.

Interest: Competitive LEC (CLEC)

Importance of number portability:

Service and location portability:

Demand for service and location portability is uncertain (7).

The FCC's role in number portability:

Service provider portability has a clear need for regulatory intervention because LECs have the power and incentive to deny their competitors access to an essential input of production (5-6). Studies, including one summarized in an appendix, demonstrate that for a large percentage of telephone subscribers, a number change is a major deterrent to changing local telephone providers (6).

Incumbent LECs have the incentive to develop service and location portability if adequate demand exists (7). FCC action regarding location portability would be difficult because of lack of consensus as to proper geographic scope and because of complex billing issues (8-9).

Establishing a framework for the national implementation of service provider portability is well within the FCC's jurisdiction, because portability will have a substantial effect on the nation's numbering resources and the promotion of competition between providers of interstate communications (24-26).

The FCC should ensure that a long term solution is implemented as soon as possible, because the transition will require a relatively small investment over the medium term solution that the LECs should not be permitted to overstate (20). The FCC should set baselines for the long term solution, such as pooling of vacant numbers, and delegate the standards to an industry committee that is closely and effectively monitored (20-21).

States have an important role as well, including conducting and overseeing portability trials, and the efficient implementation of certain aspects of portability. States should be free to extend the FCC's baseline requirements to require LECs to provide CLECs with further portability services (24).

Long-term solutions regarding number portability:

The FCC should establish a single, national call processing scenario to avoid redundant database dips (17). The N-1 scenario, in which the second-to-last carrier in routing a call handles the database query, is preferable to the other possibilities because it avoids excessive trunking needs and removes any need to reach distant databases (19). The terminating access provider scenario is inefficient because it requires the call to go through the incumbent LEC, resulting in excessive trunk usage and access costs (18). The originating service provider approach would burden all LECs with the requirement of accessing the relevant database (18-19). The N-1 scenario should utilize a forward call indicator bit as a safety backup mechanism (19).

Cost recovery:

In altering networks to accommodate service provider portability, each carrier should absorb its own costs, for efficiency and fairness reasons (23). This imposition of a greater burden on LECs is fair because they have a competitive advantage on account of their historical role as certified monopoly providers (23). Common costs should be shared by carriers in proportion to relative market share (23).

Interim measures regarding number portability:

Remote call forwarding and direct inward dialing (DID) suffer from severe competitive and technical problems. The competitive problems include provision of access revenues to the LECs, potential for degraded service by the LECs, and granting of proprietary information to the LEC. The technical problems, documented in an appendix, include an inefficient utilization of numbering resources and prevention from use of certain CLASS features, as well as longer setup times under DID (10). LECs should be required to provide interim measures to CLECs free of charge, because LECs possess a significant competitive advantage on account of their historical role as certified monopoly providers (21-22).

The transition from interim measures regarding number portability:

The intelligent network (IN) technology already deployed in most LEC switches for applications such as 800 number portability and the advanced intelligent network (AIN) technology deployed for certain other services can support major numbering schemes, including AT&T's local routing number (LRN) scheme in modified form, within about six months (11-13). These medium term solutions will offer true number portability and will not delay the implementation of longer term solutions, which will build on medium term solutions (13-14).

The FCC should require LECs to provide database solutions within six months after a *bona fide* request from a competitive carrier (14-15). This requirement should be enforced through usual means as well as by establishing implementation of true number portability as a prerequisite to granting price cap LECs enhanced pricing flexibility currently being considered separately (15). Rather than imposing a uniform national numbering scheme, which could limit flexibility, the FCC should define certain baseline criteria for the medium-term solutions, including true number portability, a third-party database, triggering capability, numbering flexibility, full feature interaction, access revenues for CLECs, and ten digit routing codes from a LEC to a CLEC (16-17).

Other:

Appendix A: "Market Research and Conclusions on the Impact of Number Portability"

Appendix B: "Analysis of Numbering Schemes"

Appendix C: "Current/Planned Trials in Which TWComm Is Involved"

U.S. AIRWAVES, INC.

Interest: Wireless communications company intending to operate a nationwide digital PCS network

Importance of number portability:

Number portability will significantly enhance competition. Any disturbance of the status quo discourages customers from changing to a service better tailored to its need or one that is more economical. National portability would eliminate a serious obstacle faced by new market entrants. (1-3)

Location portability:

The use of geographically defined numbers -- particularly the area code system -- is likely to remain necessary (and preferred by customers) for the foreseeable future. Within this framework, NXX number portability should be available to all carriers. (4)

The FCC's role in number portability:

It is essential that the FCC take the lead in assisting the industry to formulate a uniform national number portability plan. In today's increasingly mobile society, a uniform national policy is necessary to ensure that national networks can offer their services to their customers in the most efficient, cost-effective manner. Market/industry forces will also play an important role in the process including: 1) the initial and ongoing development of the technical standards for number portability; 2) the establishment of a numbering scheme; and 3) the development and ongoing maintenance and support of a national database. The FCC should consider using a framework similar to the North American Numbering Council to develop a national number portability policy and database system. (4-5)

Long-term solutions regarding number portability:

Supports AT&T number mapping approach as most efficient in conserving numbers by distinguishing the identification and location of the telephone users in separate sets of numbers. (6)

Interim measures regarding number portability:

Until national database needed for AT&T approach is established, the use of remote call forwarding and direct inward dialing can provide short term solutions. The industry should be challenged to provide an implementation plan that avoids the potential loss of the ability to provide custom local area signaling services, such as Caller ID. A reasonable time for implementing this short term plan is third quarter of 1996.

Cost recovery:

Each carrier should bear its own costs over the short term, including the costs to acquire the customer and when a customer decides to switch carriers, which will encourage carriers to move expeditiously toward the long term solution. Funding for a national database should be assessed on a proportional scale based on the size of the carrier's customer base which ensures an equitable funding scale without penalizing new and/or smaller telecommunications carriers. The NYNEX plan would create a disincentive for the original carrier to ensure that the customer smoothly moves to its new carrier along with its number and unfairly penalizes new companies by charging them in full for the original carrier's cost to provide number portability. (6-7)

900 and 500 service provider portability:

Because of the growing need for non-geographic numbers identifying persons rather than places, these types of numbers (such as 500, 800, and 900 numbers) should be fully portable. (4)

U.S. INTELCO NETWORKS, INC.

Interest: Provider of database services to ITCs

The FCC's role in number portability:

FCC should take a national leadership role in developing policy regarding local number portability that will benefit all consumers. (2-3) It should encourage development of empirical local number portability evidence through state trials to develop a record for further review and comment. This may well lead to consensus among the FCC, state commissions, and the industry as to deployment while furthering national policies such as nondiscrimination and competitive neutrality. (3-4)

Since local number portability is not necessarily needed nationwide, it may be premature to suggest that FCC alone should act to speed implementation. The FCC should direct industry to establish a standards-setting body to deal with associated call routing and feature interaction issues. (5)

The FCC should support multiple regional databases rather than a national database such as that used in the 800 database environment. This would allow natural deployment where and when demand develops. Also, one nationwide database may be inadequate if the aggregate volume of portable numbers exceeds the number of existing stored 800 numbers. (6)

One neutral entity within each regional area or "Island" should administer, maintain, and modify the local number portability database based on that Island's needs. Needs of local service providers will thus be met in a timely and responsive manner. (6)

Cost recovery:

The FCC should support Seattle Trial's phased deployment approach, implementing regional interconnected pockets of local number portability where demand is highest and costs can be recovered. This permits natural migration to a nationwide, interconnected system of regionalized data bases where costs are incurred only where demand is present to recover those costs. (4-5) A nationwide solution that assumes demand places the burden of cost recovery on ratepayers with no need for number portability. (5)

U S WEST, INC.

Interest: Regional Bell Operating Company with cable TV affiliates planning to provide local telecommunications services in competition with other incumbent telephone companies

Importance of number portability:

Service provider number portability:

More research is necessary on this issue, although service provider portability has value both to new entrants and to incumbents. There is growing evidence that the demand for service provider portability is highly elastic (6). The benefits must be weighed against the costs, which cannot be determined until a particular form of portability is identified. Reliability is as important as cost, particularly to new entrants (7).

The FCC's role in number portability:

Because location and service portability could be provided by a single carrier within its network if the market demanded it, regulatory intervention is unnecessary except to the extent that the FCC must ensure that, in addressing service provider portability, it does not inhibit the introduction of location or service portability (4). Because service provider portability requires the participation of multiple carriers that compete with each other and because agreement among those carriers as to a plan and a start date would be difficult to obtain, service provider portability requires some form of regulatory intervention to become a reality (4-5, 8-9).

As between the FCC and the state regulators, the FCC should take the leadership role primarily to avoid the possibility of incompatible portability schemes. Other reasons that the FCC should take a leadership role, despite the healthy and helpful involvement by many states, are that not all states are equally committed to a competitive local exchange market, that some states do not have the resources to address the issues fully, and that a national solution will be more cost effective (10). The FCC should act with dispatch, because its actions will make portability a reality and experience teaches that some industry members will delay if possible, although it should not act alone (11).

The FCC should take a four-part plan of action. First, it should decide that a solution for service provider portability should be national in scope, in order to avoid incompatible solutions and preserve the national seamless network and also to reduce implementation costs and facilitate deployment of portability capabilities (12-14).

Second, it should give the industry the opportunity to recommend an approach because of the industry's resources and technical expertise. Eight months would be an appropriate time frame (14). The FCC should develop the initial set of evaluation criteria and principles because that part of the process can be time-consuming and the industry's experts are technical (14-15). The recommended principles follow: the impact on the current numbering plan should be minimized; service provider portability solutions should be compatible with location and service portability solutions; there should be no negative impact on existing services and feature functionality or E911 systems; solutions should rely on existing network and support capabilities as much as possible; all calls should use network resources efficiently; each carrier should have maximum flexibility to perform portability functions within its own network; and the carrier with overall responsibility for a call should have maximum flexibility to route the call as it sees fit (15-20).

Third, the FCC should direct the issues related to CMRS service provider portability to the CMRS industry because industry discussions concerning service provider portability have focused on the wireline industry and have not addressed issues related to the wireless industry, such as fraud (20-21).

Fourth, the FCC should commence a supplemental rulemaking addressing implementation issues to address them more rapidly should the decision be made to more forward with a more robust form of service provider portability (21-22). Four issues of apparent merit for early consideration are: (1) the means of deciding when portability should be implemented in particular markets; (2) the need for, and form of, a new indicator to distinguish toll from local calls, because different LECs may not have the same local calling area; (3) the means of selecting a third party for owning and operating common elements and the means for it to recover its costs; and (4) a listing of the variety of systems, services and processes that could be affected by a new portability solution, such as billing systems, repair and maintenance systems, directory publishing, and operator and 911 services (22-26).

UNITED STATES SMALL BUSINESS ADMINISTRATION

Interest: Government agency representing interests of small businesses

Importance of number portability:

Service provider number portability:

Number portability is essential for competition to increase in the LEC market. Small businesses and local establishments will not change carriers if it means changing phone numbers, which could involve the loss of customers and significant expense. (5-6)

The FCC's role in number portability:

The complexity and magnitude of the issues involved in number portability are too extreme for the FCC's limited resources. It should establish an organization similar to the North American Numbering Plan Administrator to resolve the complex issues associated with number portability. (7)

Long-term solutions regarding number portability:

Number portability should be required for all Tier 1 LECs (those with more than 100 million dollars in gross revenue from regulated service), and optional for all other LECs. However, if a non-Tier 1 LEC decides to enter the IXC market, then it must provide number portability to those IXCs wishing to enter its local exchange market. (8)

Cost recovery:

Number portability must not be implemented in a manner that provides a significant cost advantage to the incumbent LEC. One solution is to charge all consumers the costs of developing a national database and computer network needed for number portability. Those who do not switch will benefit through lower competitive prices. (7)

Other:

The FCC should resolve the basic issues discussed above quickly, and then consider the other issues raised in the NPRM. (9)

UNITED STATES TELEPHONE ASSOCIATION

Interest: Trade association of LECs

Importance of number portability:

Service provider number portability:

Service provider portability will enhance competition and is appropriate in the long term (3). While the public interest would be served best by development of an efficient long-term solution, the presence of existing and growing local competition--in addition to a recent study--suggests that customers will be willing to change numbers to some degree (4).

Service portability:

There is no basis for the FCC to mandate service portability immediately, because there is not enough demand for the particular affected services, such as ISDN (9). In fact, growth of ISDN is inhibited less by lack of portability than by cost, because many customers who order ISDN do so as an additional service, and mandating portability would lead to increased prices (10).

Location portability:

Location portability may promote competition, but it is not possible on a nationwide basis because the NPA is essential to permit routing, billing and rating of telephone calls. (8)

The FCC's role in number portability:

Because of uniformity concerns, it is appropriate for the FCC to establish mandatory performance characteristics and oversee the development of a uniform-long term solution (4-6). However, the FCC should leave the specific technical solution, interface or protocol to industry groups and standard-setting bodies (5). A timetable and realistic final deadline for this long-term solution would be appropriate for the FCC (5-6). Implementation should be governed by the particular state regulators, as a matter of local competition (5).

Long-term solutions regarding number portability:

Any long-term service provider portability solution should contain a number of characteristics: location portability in addition to service provider portability; continued use of service features, enhanced 911 and operator services; minimal database dips to properly route calls to ported and non-ported numbers; proper rating in real time; capacity for integrated billing with minimal modifications; and the absence of any requirement that a service provider bear responsibility for or have the capability to control routing calls to other competitive service providers. The solution should also not affect the originating calling area, i.e. requiring simultaneous universal upgrades (7).

Location portability guidelines should not provide for portability outside of the geographic area associated with an NPA (8).

Cost recovery:

Until the technical characteristics of the long-term number portability solution are known, only the most general characteristics of an appropriate cost recovery process can be determined (14). States will have partial responsibility for setting payment of costs for local number portability; however, cost recovery should be neutral as between local and inter-state services (13).

Cost of a long-term number portability solution should be shared by all parties using the system because various parties may benefit from portability within a specific area, imposing costs on new competitive carriers could impede competition, and many companies pursuing local exchange competition are among the world's largest (13).

The costs of number portability should not be spread over the general base of telephone subscribers because such a system would be unfair to those who caused no costs and received no benefits, and would distort the competitive process by understating the costs of portability (15). The long-term solution should retain the principle that costs should be recovered from the cost-causer (13). No costs should be imposed in areas where local number portability is not available (14). Because Advanced Intelligent Network (AIN) functionalities are not sufficient to provide a long-term portability solution, the FCC should not rely on existing methods of cost recovery for AIN capabilities, or on revenue from AIN services (14). The costs of developing a local number portability database systems should be recovered from all carriers using the system (15).

With regard to whether LECs should be permitted to raise their rates, it is worth noting that higher rates in a competitive market do not necessarily permit cost recovery. The cost recovery process should focus on the substance and design of price cap LECs' tariffs, as well as on whether the costs receive exogenous treatment. For rate-of-return carriers, the costs of local number portability will represent additions to the rate base,

which will be reflected in tariffs for associated services. Average schedule companies should recover their costs through appropriate revisions to their tariffs or to the NECA tariff in which they concur (14).

One possibility is to assess a one-time per-line charge on end users who elect to switch carriers, which could be set to not discriminate against new entrants nor impede competition (15).

Interim measures regarding number portability:

Existing interim portability methods (Remote Call Forwarding and Flexible Direct Inward Dialing) should be permitted to continue because they do provide service provider portability and the existing tariff arrangements have not been found unlawful or unreasonable. Industry and FCC resources should be focused on the long term (12).

900 service provider portability:

Because the system that supports service provider portability for 800 services cannot be modified easily to support 900 calls, and because a platform for 500 numbers might not be able to be utilized for 900 numbers either, there is no basis to mandate service provider portability for 900 numbers (12).

500 service provider portability:

Because 500 services are in their infancy, there is little evidence of demand for portability. The immediate public interest would be better served by minimizing costs on these services and permitting demand to grow. If portability becomes beneficial to the public interest, the FCC can mandate portability, which can best be provided through a national, centralized database similar to the 800 SMS system. The FCC should direct an industry group to develop guidelines and implement the database solution, but reserve two key issues to resolve itself because of conflict of interest problems: selection of a 500 SMS contractor/manager, and recovery of the costs of a database system (11).

WORLDCOM, INC., D/B/A LDDS WORLDCOM

Interest: Long distance service provider

Importance of number portability:

Supports FCC's long-range proposals to advance a national number portability policy. This is a step toward some form of facilities-based competition in some parts of the local exchange market. This will help consumers by encouraging competition and higher quality service in the local service market. (1-2)

The FCC's role in number portability:

Market forces alone will not drive the development and deployment of number portability, and the FCC needs to assume a leadership role in developing a national policy. The FCC must not lose sight of the fact that until there is full facilities-based competition in the local service market, which will take many years, local number portability offers only limited benefit to consumers and long distance service providers. (2-3)

Other:

The FCC can only assure near-term actual competition in the local exchange and access markets, and the continued competitiveness of the long distance market, by adopting a policy promoting the offering of reasonably priced wholesale local service products. Interexchange carriers need to be able to package their own services with local services in a convenient "one-stop shopping" format to avoid a significant competitive disadvantage. Such a policy would bring many benefits including: more competition faster, more consumer choice, promotion of new facilities-based local networks, and foundation for RBOC entry. A white paper attached to the comments explores this issue in more detail. As the FCC considers local number portability, it must also give consideration to a wholesale local service model as a near-term means of achieving immediate, effective, and lasting competition in the local exchange market. (4-6)

YELLOW PAGES PUBLISHERS ASSOCIATION

Interest: Association of directory publishers

Importance of number portability:

Location portability:

Because the association between telephone numbers and geographic location may dissolve, the data processing systems that automatically assign telephone numbers to the appropriate directories could no longer be used reliably if location portability were mandated (3-4).

The Commission should explicitly seek input from the directory publishing industry to develop reasonable time frames in which to make changes necessary to accommodate location number portability (4). No particular provision is suggested, except that the time frame be adequate (4).